

## **PEER REVIEW PLAN**

### **Sainte Genevieve, Missouri Tributaries and Recreation Flood Risk Management Project General Reevaluation Report**

#### **1. Purpose and Requirements.**

a. This document outlines the peer review plan for the Ste Genevieve, Missouri, Project Tributaries and Recreation General Reevaluation Report. EC 1105-2-408 dated 31 May 2005 “Peer Review of Decision Documents” 1) establishes procedures to ensure the quality and credibility of Corps decision documents by adjusting and supplementing the review process and 2) requires that documents have a peer review plan. The Circular applies to all feasibility studies and reports and any other reports that lead to decision documents that require authorization by Congress.

b. The Circular outlines the requirement of the two review approaches (independent technical review (ITR) and external peer review (EPR)) and provides guidance on Corps Planning Centers of Expertise (PCX) involvement in the approaches. This document addresses review of the decision document as it pertains to both approaches and planning coordination with the appropriate Center.

(1) ITR. Districts are responsible for reviewing the technical aspects of the decision documents through the ITR approach. ITR is a critical examination by a qualified person or team that was not involved in the day-to-day technical work that supports the decision document. ITR is intended to confirm that such work was done in accordance with clearly established professional principles, practices, codes, and criteria. In addition to technical review, documents should also be reviewed for their compliance with laws and policy. The Circular also requires that DrChecks (<https://www.projnet.org/projnet/>) be used to document all ITR comments, responses, and associated resolution accomplished.

(2) EPR. The Circular added external peer review to the existing Corps review process. This approach does not replace the standard ITR process. The external peer review approach applies in special cases where the magnitude and risk of the project are such that a critical examination by a qualified person outside the Corps is necessary. EPR can also be used where the information is based on novel methods, presents complex interpretation challenges, contains precedent-setting methods or models, or is likely to affect policy decisions that have a significant impact. The degree of independence required for technical review increases as the project magnitude and project risk increase.

(a) Projects with low magnitude and low risk may use a routine ITR.

(b) Projects with either high magnitude/low risk or low magnitude/high risk would require both Corps and outside reviewers on the ITR team to address the portions of the project that cause the project to rate high on the magnitude or risk scale.

(c) Projects with high magnitude and high risk require a routine ITR as well as an EPR.

(3) PCX Coordination. The Circular outlines PCX coordination in conjunction with preparation of the review plan. Districts should prepare the plans in coordination with the appropriate PCX. The Corps PCX are responsible for the accomplishment and quality of ITR and EPR for decision documents covered by the Circular. Centers may conduct the review or manage the review to be conducted by others. Reviews will be assigned to the appropriate Center based on business programs. The Circular outlines alternative procedures to apply to decision documents. Each Center is required to post review plans to its website every three months as well as links to any reports that have been made public. The Office of Water Policy Review (OPWR) will consolidate the lists of all review plans and establish a mechanism for soliciting public feedback on the review plans.

## **2. Project Description.**

a. This decision document will present the details of a flood risk management study undertaken to reduce flash flooding damages to historic homes in the City of Ste Genevieve as described in the main body of the Project Management Plan (PMP).

b. Product Delivery Team. The product delivery team (PDT) is comprised of those St. Louis District individuals directly involved in the development of the decision document. Contact information and disciplines are listed below.

<b>First</b>	<b>Last</b>	<b>Discipline</b>	<b>Phone</b>	<b>Email</b>
Kniep	Michelle	Project Manager / Plan Formulation	314-331-8404	<a href="mailto:Michelle.R.Kniep@usace.army.mil">Michelle.R.Kniep@usace.army.mil</a>
Bush	Jessica	Geotechnical/Technical Lead	314-331-8443	<a href="mailto:Jessica.L.Bush@usace.army.mil">Jessica.L.Bush@usace.army.mil</a>
Hamm	Michael	Civil Engineer	314-331-8255	<a href="mailto:Michael.E.Hamm@usace.army.mil">Michael.E.Hamm@usace.army.mil</a>
Sanders	Dawayne	Cost Estimating	314-331-8321	<a href="mailto:Dawayne.E.Sanders@usace.army.mil">Dawayne.E.Sanders@usace.army.mil</a>
Norris	Terry	Cultural Resources	314-331-8464	<a href="mailto:Terry.Norris@usace.army.mil">Terry.Norris@usace.army.mil</a>
Wolf	Sharon	Real Estate Acquisition	314-331-8166	<a href="mailto:Sharon.Wolf@usace.army.mil">Sharon.Wolf@usace.army.mil</a>

Lovelace	James	Real Estate Appraisal	314-331-8175	<a href="mailto:James.T.Lovlace@usace.army.mil">James.T.Lovlace@usace.army.mil</a>
Boeckmann	John	Hydrology and Hydraulics	314-331-8801	<a href="mailto:John.Boeckmann@usace.army.mil">John.Boeckmann@usace.army.mil</a>
Walton	Francis	Environmental	314-331-8487	<a href="mailto:Francis.X.Walton@usace.army.mil">Francis.X.Walton@usace.army.mil</a>
Asbed	Jeff	Office of Counsel	314-331-8194	<a href="mailto:Jeffrey.E.Asbed@usace.army.mil">Jeffrey.E.Asbed@usace.army.mil</a>
Frerker	Charles	Regulatory	314-331-8583	<a href="mailto:Charles.F.Frerker@usace.army.mil">Charles.F.Frerker@usace.army.mil</a>

c. Vertical Team. The Vertical Team includes District management, District Support Team (DST) and Review Integration Team (RIT) staff as well as members of the Planning of Community of Practice (PCoP). The District project manager is Michelle Kniep, CEMVS-PM-F, 314-331-8404. DST manager for this project is Thomas Sandles, CEMVD-PD-SP, 601-634-5926. The RIT manager is Zoltan Montvai, CECW-MVD, 202-761-4495.

**3. ITR Plan.** As outlined above in paragraph 1.b., the District is responsible for ensuring adequate technical review of decision documents. The responsible District for this decision document is St. Louis District. The St. Paul District is recommended as the ITR District due to its regional experience in similar projects.

a. General. An ITR team (ITRT) and ITR Manager were coordinated and approved by the Flood Risk Management Center of Expertise in February 2007. The ITR Manager for this project is Aaron Snyder, St. Paul District. The ITR Manager is responsible for providing information necessary for setting up the review, communicating with the Project Manager, providing a summary of critical review comments, collecting grammatical and editorial comments from the ITR team (ITRT), ensuring that the ITRT has adequate funding to perform the review, facilitating the resolution of the comments, and certifying that the ITR has been conducted and resolved in accordance with policy.

b. Team. The ITRT will be comprised of individuals that have not been involved in the development of the decision document and will be chosen based on expertise, experience, and/or skills. The members will roughly mirror the composition of the PDT. The ITRT members and their areas of expertise are:

First	Last	Discipline	Phone	Email
Snyder	Aaron	Project Manager / Plan Formulation ITR Lead, MVP	651-290-5789	<a href="mailto:Aaron.M.Snyder@usace.army.mil">Aaron.M.Snyder@usace.army.mil</a>
McKegney	Molly	Office of Counsel, MVP	651-290-5711	<a href="mailto:Molly.A.McKegney@usace.army.mil">Molly.A.McKegney@usace.army.mil</a>
Carmack	Charlene	Environmental, MVR	309-794-5570	<a href="mailto:Charlene.Carmack@usace.army.mil">Charlene.Carmack@usace.army.mil</a>
TBD		Cost Estimates, NWW		
Gary	Wolf	Civil Engineering, MVP	651-290-5288	<a href="mailto:Gary.C.Wolf@usace.army.mil">Gary.C.Wolf@usace.army.mil</a>

Gnabasik	Virginia	Archaeologist, MVP	651-290-5262	<a href="mailto:Virginia.R.Gnabasik@usace.army.mil">Virginia.R.Gnabasik@usace.army.mil</a>
Sommerland	Kevin	Real Estate, MVP	651-290-5593	<a href="mailto:Kevin.J.Sommerland@usace.army.mil">Kevin.J.Sommerland@usace.army.mil</a>
Carlson	Richard	Economist, MVP	651-290-5259	<a href="mailto:Richard.D.Carlson@usace.army.mil">Richard.D.Carlson@usace.army.mil</a>
Bray	Matthew	Geotechnical, MVP	651-290-5647	<a href="mailto:Matthew.M.Bray@usace.army.mil">Matthew.M.Bray@usace.army.mil</a>
Lesher	Michael	Hydraulics, MVP	651-290-5637	<a href="mailto:Michael.D.Lesher@usace.army.mil">Michael.D.Lesher@usace.army.mil</a>

c. Communication. The communication plan for the ITR is as follows:

(1) The team will use DrChecks to document the ITR process. An electronic version of the draft report and appendices in Word format shall be provided to the ITRT at least one business day prior to the start of the comment period.

(2) The PDT shall host an ITR kick-off meeting to orient the ITRT during the first week of the comment period. If funds are not available for an on-site meeting, the PDT shall provide a presentation about the project, including photos of the site, for the team.

(3) The Study Manager shall inform the ITR manager when all responses have been entered into DrChecks and conduct an in-progress review to summarize comment responses.

(4). A revised electronic version of the report and appendices with comments incorporated will be made available to the ITRT for use during back checking of the comments.

(5) Team members shall contact ITRT members or leader as appropriate to seek clarification of a comment's intent or provide clarification of information in the report. Discussions shall occur outside of DrChecks but a summary of discussions may be provided in the system.

(6) Reviewers will be encouraged to contact PDT members directly via email or phone to clarify any confusion. DrChecks shall not be used to post questions needed for clarification.

(7) The ITRT, PDT, and vertical team shall conduct an after action review (AAR) no later than two weeks after the policy guidance memo is received.

d. Funding. The Project Manager will work with the ITR manager to ensure that adequate funding is available and is commensurate with the level of review required. The current cost estimate for this review is between \$20,000 and \$25,000.

e. Timing and Schedule.

(1) The pre-AFB ITR was completed in February 2007, utilizing the ITR team identified in Section 3.b. above. The AFB is tentatively scheduled for April 2008.

(2) The ITR of the draft report (post-AFB) will begin once a recommended plan has been selected, the preliminary design is complete, and the environmental assessment has been performed.

(3) The PDT will review the draft report to ensure consistency across the disciplines and resolve any issues prior to the start of ITR for the draft and final reports.

(4) The ITR process for the draft and final reports will follow the timeline below. Actual dates will be scheduled once the period draws closer. It is estimated that review of the draft document will begin in May 2008 and review of the final document will begin in June 2008.

<b>Task</b>	<b>Date</b>
Comment period begin	Week 1
Kickoff meeting	Week 1
ITR Comments due	Week 2
PDT Responses due	Week 2
Responses Backcheck	Week 3
Certification	Week 3
After Action Review	NLT Week 6

f. Review.

(1) ITR Team responsibilities are as follows:

(a) Reviewers shall review the draft report to confirm that work was done in accordance with established professional principles, practices, codes, and criteria and for compliance with laws and policy. Comments on the report shall be submitted into DrChecks.

(b) Reviewers shall pay particular attention to one's discipline but may also comment on other aspects as appropriate. Reviewers that do not have any significant comments pertaining to their assigned discipline shall provide a comment stating this.

(c) Grammatical and editorial comments shall not be submitted into DrChecks. Comments should be submitted to ITR manager via electronic mail using tracked changes feature in the Word document or as a hard copy mark-up. The ITR manager shall provide these comments to the Study Manager.

(d) Review comments shall contain these principal elements:

- A clear statement of the concern
- The basis for the concern, such as law, policy, or guidance
- Significance for the concern
- Specific actions needed to resolve the comment

(e) The “Critical” comment flag in DrChecks shall not be used unless the comment is discussed with the ITR manager and/or the Study Manager first.

(2) PDT Team responsibilities are as follows:

(a) The team shall review comments provided by the ITRT in DrChecks and provide responses to each comment using “*Concur*”, “*Non-Concur*”, or “*For Information Only*”. *Concur* responses shall state what action was taken and provide revised text from the report if applicable. *Non-Concur* responses shall state the basis for the disagreement or clarification of the concern and suggest actions to negotiate the closure of the comment.

(b) Team members shall contact the PDT and ITRT managers to discuss any “non-concur” responses prior to submission.

g. Resolution.

(1) Reviewers shall back check PDT responses to the review comments and either close the comment or attempt to resolve any disagreements. Conference calls shall be used to resolve any conflicting comments and responses.

(2) Reviewers may “agree to disagree” with any comment response and close the comment with a detailed explanation. ITRT members shall keep the ITR manager of problematic comments. The vertical team will be informed of any policy variations or other issues that may cause concern during Headquarter review.

h. Certification. To fully document the ITR process, a statement of technical review will be prepared. Certification by the ITR manager and the Study Manager will occur once issues raised by the reviewers have been addressed to the review team’s satisfaction. Indication of this concurrence will be documented by the signing of a certification statement (Appendix A). A summary report of all comments and responses will follow the statement and accompany the report throughout the report approval process.

4. External Peer Review Plan. This decision document will present the details of a flood risk management study undertaken to reduce flash flooding damages to historic homes in the City of Ste Genevieve as described in the main body of the PMP. This project does not meet the EPR standards outlined in the Circular.

a. Project Magnitude. The magnitude of this project is determined as low. The cost of the project will likely not exceed \$6 million. Due to the authorization language, it is assumed that the amount of benefits accrued by the project will justify the cost. The project is not considered complex because standard engineering models and practices are used and the alternatives under consideration are not novel or unique.

b. Project Risk. This project is considered low risk overall. The flooding to be addressed is flash flooding, which occurs over very short periods of time, with little to no advance

warning. The design has taken into account the rapid rise and fall of flood waters and the erosion potential of fast-moving flood waters.

c. Vertical Team Consensus. The vertical team concurs that the subject matter covered in the decision document is NOT novel, controversial, or precedent-setting, and the project will not have significant interagency interest or significant economic, environmental or social effects.

d. Therefore, a separate EPR will not be conducted on the decision document. The ITR, Public and Agency Review will serve as the main review approaches.

## 5. Public and Agency Review.

a. Public review of the document will occur after issuance of the AFB policy guidance memo and concurrence by HQUSACE that the document is ready for public release. As such, public comments other than those provided at any public meetings held during the planning process were not available to the pre-AFB ITR team. Public comments will be available to the ITR team reviewing the final document.

b. Public review of this document will begin approximately one month after the completion of the ITR process and policy guidance memo. The period will last 30 days as required by law.

c. The public review of necessary State or Federal permits will also take place during this period.

d. A formal State and Agency review will occur concurrently with the public review. However, it is anticipated that intensive coordination with these agencies will have occurred concurrent with the planning process. Possible public concern issues are changes to homes and lack of bridge replacements in the non-structural alternatives and interior drainage in the levee alternatives. Possible State and Agency issues are concern over visual impacts of the non-structural and levee alternatives, and ecosystem impacts of the channel and detention alternatives.

e. Upon completion of the review period, comments will be consolidated in a matrix and addressed, if needed. A comment resolution meeting will take place if needed to decide upon the best resolution of comments. A summary of the comments and resolutions will be included in the document.

6. Model Certification. The only models used during the planning process were HEC-RAS for the hydraulic information, HEC-HMS to calculate peak flows at given points, and HEC-FDA for calculating the economic benefits. HEC-RAS and HEC-HMS are engineering models (as opposed to planning models) and are not subject to the certification requirements of EC 1105-2-407. HEC-FDA is a corporate planning model whose certification is pending (proponent is Headquarters).

7. PCX coordination. The appropriate PCX for this document is Flood Risk Management, SPD. This review plan will be submitted through the MVS District Planning Chief, to the PCX

Director, Mark Charleton, for review. MVD will approve the review plan. Since it was determined that this project is of low magnitude and low risk, an EPR will not be required. The approved review plan will be posted to the district website, with a link provided to the PCX and HQ. Any public comments on the review plan will be collected by the Office of Water Policy Review (OWPR) and provided to the PDT District for resolution and incorporation if needed.

8. Approvals. The PDT will carry out the review plan as described. The Study Manager will submit the plan to the PDT District Planning Chief for review. The MVD Commander will approve the plan.



**APPENDIX A  
STATEMENT OF TECHNICAL REVIEW**

**COMPLETION OF INDEPENDENT TECHNICAL REVIEW  
STE GENEVIEVE TRIBUTARIES AND RECREATION PROJECT**

St. Louis District has completed the General Reevaluation Report of the Ste Genevieve, Missouri, Project. Notice is hereby given that an independent technical review, that is appropriate to the level of risk and complexity inherent in the project, has been conducted as defined in the Review Plan. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses; alternatives evaluated; the appropriateness of data used and level obtained; and reasonableness of the result, including whether the product meets the customer's needs consistent with law and existing Corps policy. The independent technical review was accomplished by an independent team composed of St. Louis and St. Paul District staff. All comments resulting from ITR have been resolved.

\_\_\_\_\_  
AARON SNYDER  
Team Leader, Ste Genevieve Project  
Independent Technical Review Team

\_\_\_\_\_  
Date

\_\_\_\_\_  
MICHELLE KNIEP  
Project Manager, Ste Genevieve Project

\_\_\_\_\_  
Date

**CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW**

A summary of all comments and responses are attached. Significant concerns and the explanation of the resolution are as follows:

*(Describe the major technical concerns, possible impact and resolution)*

As noted above, all concerns resulting from the independent technical review of the project have been fully resolved.

\_\_\_\_\_  
JAMES ZEREGA, P.E.  
Acting Chief, Planning and Project Development Branch  
St. Louis District

\_\_\_\_\_  
Date